

L1: Entry 1 of 2

File: DWPI

Apr 9, 2003

DERWENT-ACC-NO: 1998-349826

DERWENT-WEEK: 200325

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TITLE: Synergistic fungicide combination for plant protection - comprising 4,6-di:phenoxy-5-fluoro-pyrimidine derivative and, e.g. tebuconazole, triadimenol, mancozeb, folpet or metalaxyl

INVENTOR: DUTZMANN, S; HEINEMANN, U; STENZEL, K

PRIORITY-DATA: 1997DE-1005159 (February 11, 1997), 1996DE-1051217 (December 10, 1996)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
EP 944318 B1	April 9, 2003 ·	G .	000	A01N043/88
DE 19739982 A1	June 18, 1998	•	045	A01N043/88
WO 9825465 A1	June 18, 1998	G	000	A01N043/88
ZA 9711024 A	August 26, 1998		067	A01N000/00
AU 9856559 A	July 3, 1998	<b>₹</b>	000	A01N043/88
CZ 9902086 A3	September 15, 1999		000	A01N043/88
EP 944318 A1	September 29, 1999	G	000	A01N043/88
CN 1239866 A	December 29, 1999		000	A01N043/88
BR 9714390 A	May 16, 2000		000	A01N043/88
HU 200000504 A2	June 28, 2000	•	000	A01N043/88
US 6191128 B1	February 20, 2001	ž,	000	A61K031/535
AU 729713 B	February 8, 2001	•	000	A01N043/88
MX 9905065 A1	January 1, 2000		000	A01N043/88
KR 2000069059 A	November 25, 2000		000	A01N043/88
JP 2001505886 W	May 8, 2001		059	A01N043/88
US 6303598 B1	October 16, 2001		000	A61K031/535
US 6372737 B1	April 16, 2002		000	A01N043/40
RU 2192743 C2	November 20, 2002		000	A01N043/88
US 6509343 B1	January 21, 2003		000	A01N055/02

 $\begin{array}{c} 6303598 \ \, B1 \ \, , \ \, US \ \, 6372737 \ \, B1 \ \, INT-CL \ \, (IPC): \ \, \underline{Ao1} \ \, \underline{N} \ \, 0/00; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{43/40}; \ \, \underline{Ao1} \ \, \underline{N} \ \, 43/54; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{35/55}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{35/555}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{35.06}; \\ \underline{Ao1} \ \, \underline{N} \ \, 37:22; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{37:24}; \ \, \underline{Ao1} \ \, \underline{N} \ \, 37:50; \ \, \underline{Ao1} \ \, \underline{N} \ \, 43/88; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{43:30}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{43:36}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{47:30}; \\ \underline{Ao1} \ \, \underline{N} \ \, \underline{47:34}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{47:44}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{51:00}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{47:34}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{47:44}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{47:30}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{47:30}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{47:44}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{47:30}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{47:34}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{47:44}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{47:30}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{47:30}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{47:30}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{47:34}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{47:44}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{47:30}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{47:30}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{47:30}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{47:30}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{47:30}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{47:30}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{47:30}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{47:30}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{47:30}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{47:30}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{47:30}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{47:30}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{47:30}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{47:30}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{47:30}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{47:30}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{47:30}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{47:30}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{47:30}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{43:40}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{43:40}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{43:40}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{43:40}; \ \, \underline{Ao1} \ \, \underline{N} \ \, \underline{43:40}; \$ 

ABSTRACTED-PUB-NO: DE 19739982A BASIC-ABSTRACT:

An active agent combination comprises:

- (A) 4-(2-chlorophenoxy)-5-fluoro-6-(2-((5,6-dihydro-1,4,2-oxadiazin-3-yl)(-methoxyimino)methyl)-phenoxy)-pyrimidine of formula (I), and
- (B) at least 1 of antracol (propineb), euparen (dichlofluanid), euparen M (tolylfluanid), bitertanol, tebuconazole (II), triadimefon, triadimenol, imidacloprid, sumisclex, mancozeb, folpet (phaltan), dimetomorph, cymoxanil, metalaxyl, aliette (fosetyl-Al), famoxadone, pyrimethanil, cyprodinyl, mepanipyrim, kresoximmethyl, azoxystrobin, epoxiconazole, metconazole, fluquinconazole, fludioxonil, fenpiclonil, guazatine, bion, (2-methyl-1(((1-(4-methylphenyl)ethyl)amino)carbonyl)-propyl)-carboxylic acid 1-methylethyl ester, 8-t-butyl-2-(N-ethyl-N-n-propyl-amino)-methyl-1-

1-methylethyl ester, 8-t-butyl-2-(N-ethyl-N-n-propyl-amino)-methyl-1-, 4-dioxa-spiro-(5,4)-decane, 2,3-dichloro-4-(1-methylcyclohexylcarbonylami- no)-phenol, N-(R)-(1-(4-chlorophenyl)-ethyl)-2,2-dichloro-1-ethyl-3t-methy-l-1r-cyclopropane-carboxamide, fluazinam, captan, monceren (pencycuron) and fenipiclonil.

The weight ratio of (A) to (B) is preferably 1:0.01-50.

USE - The combination is a fungicide (claimed), useful for protecting plants against pathogenic fungi such as Plasmodio phoromyces, Oomycetes, Chytridiomyces, Zygomycetes, Ascomycetes, Basidiomycetes and Deuteromycetes. It is especially effective against cereal diseases (e.g. Erysiphe, Cochliobolus, Pyrenophora, Rhynchsporium, Septoria, Fusarium Pseudocercosporella or Leptosphaeria); and fungal infections of other crops such as vines, orchards or vegetables (e.g. Phytophthora, Plasmopara, Pythium, Sphaerotheca, Uncinula, Venturia, Alternaria, Rhizoctonia, Botrytis, Sclerotinia or Sclerotium).

The combination is applied to <u>foliage</u> at a concentration of 1-0.0001 (preferably 0.5-0.001) %, to soil at a concentration of 0.00001-0.1 (preferably 0.0001-0.001) % or to seeds at 0.001-50 (preferably 0.01-10) g/kg.

ADVANTAGE - (A) and (B) have a synergistic fungicidal effect, so that the effect of the known fungicide (I) (described in DE 19602095) at low application rates is improved. The combination has very strong fungicidal activity and good plant compatibility. ABSTRACTED-PUB-NO:

US 6191128B EQUIVALENT-ABSTRACTS:

An active agent combination comprises:

- (A) 4-(2-chlorophenoxy)-5-fluoro-6-(2-((5,6-dihydro-1,4,2-oxadiazin-3-yl)(-methoxyimino)methyl)-phenoxy)-pyrimidine of formula (I), and
- (B) at least 1 of antracol (propineb), euparen (dichlofluanid), euparen M (tolylfluanid), bitertanol, tebuconazole (II), triadimefon, triadimenol, imidacloprid, sumisclex, mancozeb, folpet (phaltan), dimetomorph, cymoxanil, metalaxyl, aliette (fosetyl-Al), famoxadone, pyrimethanil, cyprodinyl, mepanipyrim, kresoximmethyl, azoxystrobin, epoxiconazole, metconazole, fluquinconazole, fludioxonil, fenpiclonil, guazatine, bion,

(2-methyl-1(((1-(4-methylphenyl)ethyl)amino)carbonyl)-propyl)-carboxylic acid 1-methylethyl ester, 8-t-butyl-2-(N-ethyl-N-n-propyl-amino)-methyl-1-,4-dioxa-spiro-(5,4)-decane, 2,3-dichloro-4-(1-methylcyclohexylcarbonylami- no)-phenol, N-(R)-(1-(4-chlorophenyl)-ethyl)-2,2-dichloro-1-ethyl-3t-methy-1-1r-cyclopropane-carboxamide, fluazinam, captan, monceren (pencycuron) and fenipiclonil.

The weight ratio of (A) to (B) is preferably 1:0.01-50.

USE - The combination is a fungicide (claimed), useful for protecting plants against pathogenic fungi such as Plasmodio phoromyces, Oomycetes, Chytridiomyces, Zygomycetes, Ascomycetes, Basidiomycetes and Deuteromycetes. It is especially effective against cereal diseases (e.g. Erysiphe, Cochliobolus, Pyrenophora, Rhynchsporium, Septoria, Fusarium Pseudocercosporella or Leptosphaeria); and fungal infections of other crops



such as vines, orchards or vegetables (e.g. Phytophthora, Plasmopara, Pythium, Sphaerotheca, Uncinula, Venturia, Alternaria, Rhizoctonia, Botrytis, Sclerotinia or Sclerotium).

The combination is applied to <u>foliage</u> at a concentration of 1-0.0001 (preferably 0.5-0.001) %, to soil at a concentration of 0.00001-0.1 (preferably 0.0001-0.001) % or to seeds at 0.001-50 (preferably 0.01-10) g/kg.

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US 6303598B

An active agent combination comprises:

- (A) 4-(2-chlorophenoxy)-5-fluoro-6-(2-((5,6-dihydro-1,4,2-oxadiazin-3-yl)(-methoxyimino)methyl)-phenoxy)-pyrimidine of formula (I), and
- (B) at least 1 of antracol (propineb), euparen (dichlofluanid), euparen M (tolylfluanid), bitertanol, tebuconazole (II), triadimefon, triadimenol, imidacloprid, sumisclex, mancozeb, folpet (phaltan), dimetomorph, cymoxanil, metalaxyl, aliette (fosetyl-Al), famoxadone, pyrimethanil, cyprodinyl, mepanipyrim, kresoximmethyl, azoxystrobin, epoxiconazole, metconazole, fluquinconazole, fludioxonil, fenpiclonil, guazatine, bion,

(2-methyl-1(((1-(4-methylphenyl)ethyl)amino)carbonyl)-propyl)-carboxylic acid 1-methylethyl ester, 8-t-butyl-2-(N-ethyl-N-n-propyl-amino)-methyl-1-,4-dioxa-spiro-(5,4)-decane, 2,3-dichloro-4-(1-methylcyclohexylcarbonylami-no)-phenol, N-(R)-(1-(4-chlorophenyl)-ethyl)-2,2-dichloro-1-ethyl-3t-methy-l-1r-cyclopropane-carboxamide, fluazinam, captan, monceren (pencycuron) and fenipiclonil.

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USE - The combination is a fungicide (claimed), useful for protecting plants against pathogenic fungi such as Plasmodio phoromyces, Oomycetes, Chytridiomyces, Zygomycetes, Ascomycetes, Basidiomycetes and Deuteromycetes. It is especially effective against cereal diseases (e.g. Erysiphe, Cochliobolus, Pyrenophora, Rhynchsporium, Septoria, Fusarium Pseudocercosporella or Leptosphaeria); and fungal infections of other crops such as vines, orchards or vegetables (e.g. Phytophthora, Plasmopara, Pythium, Sphaerotheca, Uncinula, Venturia, Alternaria, Rhizoctonia, Botrytis, Sclerotinia or Sclerotium).

The combination is applied to <u>foliage</u> at a concentration of 1-0.0001 (preferably 0.5-0.001) %, to soil at a concentration of 0.00001-0.1 (preferably 0.0001-0.001) % or to seeds at 0.001-50 (preferably 0.01-10) g/kg.

ADVANTAGE - (A) and (B) have a synergistic fungicidal effect, so that the effect of the known fungicide (I) (described in DE 19602095) at low application rates is improved. The combination has very strong fungicidal activity and good plant compatibility.

US 6372737B

An active agent combination comprises:

- (A) 4-(2-chlorophenoxy)-5-fluoro-6-(2-((5,6-dihydro-1,4,2-oxadiazin-3-yl)(-methoxyimino)methyl)-phenoxy)-pyrimidine of formula (I), and
- (B) at least 1 of antracol (propineb), euparen (dichlofluanid), euparen M (tolylfluanid), bitertanol, tebuconazole (II), triadimefon, triadimenol, imidacloprid, sumisclex, mancozeb, folpet (phaltan), dimetomorph, cymoxanil, metalaxyl, aliette (fosetyl-Al), famoxadone, pyrimethanil, cyprodinyl, mepanipyrim, kresoximmethyl, azoxystrobin, epoxiconazole, metconazole, fluquinconazole, fludioxonil, fenpiclonil, guazatine, bion,

(2-methyl-1(((1-(4-methylphenyl)ethyl)amino)carbonyl)-propyl)-carboxylic acid
1-methylethyl ester, 8-t-butyl-2-(N-ethyl-N-n-propyl-amino)-methyl-1,4-dioxa-spiro-(5,4)-decane, 2,3-dichloro-4-(1-methylcyclohexylcarbonylami- no)-phenol,
N-(R)-(1-(4-chlorophenyl)-ethyl)-2,2-dichloro-1-ethyl-3t-methyl-1r-cyclopropane-carboxamide, fluazinam, captan, monceren (pencycuron) and

fenipiclonil.

The weight ratio of (A) to (B) is preferably 1:0.01-50.

USE - The combination is a fungicide (claimed), useful for protecting plants against pathogenic fungi such as Plasmodio phoromyces, Oomycetes, Chytridiomyces, Zygomycetes, Ascomycetes, Basidiomycetes and Deuteromycetes. It is especially effective against cereal diseases (e.g. Erysiphe, Cochliobolus, Pyrenophora, Rhynchsporium, Septoria, Fusarium Pseudocercosporella or Leptosphaeria); and fungal infections of other crops such as vines, orchards or vegetables (e.g. Phytophthora, Plasmopara, Pythium, Sphaerotheca, Uncinula, Venturia, Alternaria, Rhizoctonia, Botrytis, Sclerotinia or Sclerotium).

The combination is applied to  $\underline{\text{foliage}}$  at a concentration of 1-0.0001 (preferably 0.5-0.001) %, to soil at a concentration of 0.00001-0.1 (preferably 0.0001-0.001) % or to seeds at 0.001-50 (preferably 0.01-10) g/kg.

ADVANTAGE - (A) and (B) have a synergistic fungicidal effect, so that the effect of the known fungicide (I) (described in DE 19602095) at low application rates is improved. The combination has very strong fungicidal activity and good plant compatibility.

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ANSWER 1 OF 2 REGISTRY COPYRIGHT 2003 ACS
L1
     175217-20-6 REGISTRY
RN
CN
     3-Thiophenecarboxamide, 4,5-dimethyl-N-2-propenyl-2-(trimethylsilyl)-
     (9CI)
           (CA INDEX NAME)
OTHER NAMES:
     Latitude
CN
     MON 65500
CN
CN
     N-Allyl-4,5-dimethyl-2-trimethylsilylthiophene-3-carboxamide
CN
     Silthiofam
CN
     Silthiopham
FS
     3D CONCORD
MF
     C13 H21 N O S Si
CI
     COM
SR
     CA
LC
     STN Files:
                  BIOSIS, CA, CAPLUS, CASREACT, CBNB, TOXCENTER, USPAT2,
       USPATFULL
           SiMe3
  Me
           - NH- СН2- СН== СН2
          0
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
              26 REFERENCES IN FILE CA (1957 TO DATE)
               4 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
              26 REFERENCES IN FILE CAPLUS (1957 TO DATE)
L1
     ANSWER 2 OF 2 REGISTRY COPYRIGHT 2003 ACS
RN
     133-06-2 REGISTRY
CN
     1H-Isoindole-1,3(2H)-dione,
3a, 4, 7, 7a-tetrahydro-2-[(trichloromethyl)thio]-
      (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
     4-Cyclohexene-1,2-dicarboximide, N-[(trichloromethyl)thio]- (8CI)
OTHER NAMES:
CN
     Aacaptan
CN
     Amercide
CN
     Bangtan
CN
     Bangton
CN
     Buvisild K
CN
     Captab
CN
     Captadin
CN
     Captaf
CN
     Captaf 85W
CN
     Captan
CN
     Captan 50W
CN
     Captex
CN
     Deltan
CN
     Esso fungicide 406
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Flit 406
CN
CN
     Fungus Ban Typ
CN
     Glyodex 37-22
CN
     Нехасар
CN
     Kaptan
CN
     Kaptazor
CN
     Malipur
     Merpan
CN
     Micro-Check 12
CN
CN
     N-Trichloromethylmercapto-4-cyclohexene-1, 2-dicarboximide
     N-Trichloromethylthio-3a, 4, 7, 7a-tetrahydrophthalimide
CN
     N-Trichloromethylthio-4-cyclohexene-1,2-dicarboximide
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CN
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     N-[(Trichloromethyl)thio]-4-cyclohexene-1,2-dicarboximide
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     Neracid
CN
     Orthocide
CN
     Orthocide 406
     Orthocide 50
CN
     Orthocide 7.5
CN
     Orthocide 75
CN
CN
     Orthocide 75W
     Orthocide 83
CN
CN
     Orthocide 83RP
     Orthocide S 50
CN
     Osocide
CN
     Radocaptan
CN
     Rallis captaf
CN
CN
     SR 406
     Stauffer captan
CN
CN
     Trimegol
CN
     Ugecap
CN
     Ugecap 83
CN
     Vancide 89
CN
     Vancide 89RE
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for
     DISPLAY
FS
     3D CONCORD
     1321-42-2, 120528-25-8, 37335-15-2
DR
MF
     C9 H8 Cl3 N O2 S
CI
     COM
LC
     STN Files:
                  AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS,
       BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN,
       CHEMCATS, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM*,
       DIOGENES, DRUGU, EMBASE, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB,
MEDLINE,
       MRCK*, MSDS-OHS, NIOSHTIC, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER,
       ULIDAT, USPAT2, USPATFULL, VETU
         (*File contains numerically searchable property data)
     Other Sources: DSL**, EINECS**, TSCA**
         (**Enter CHEMLIST File for up-to-date regulatory information)
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\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

4525 REFERENCES IN FILE CA (1957 TO DATE)

44 REPRENCES TO NON-SPECIFIC DERIVATIONS IN FILE CA 4527 REPRENCES IN FILE CAPLUS (1957 TO FE) 39 REFERENCES IN FILE CAOLD (PRIOR TO 1967)